

CLAIMS

What is Claimed is:

1. A RFID tag assembly, comprising;
a first substrate having first and second surfaces;
5 at least one passive loop disposed on at least one of said first substrate surfaces, said passive loop being adapted to receive and transmit at least one RFID signal;
and
at least one RFID tag member, said tag member including a second substrate having first and second surfaces and at least one RFID tag disposed on said second substrate first surface, said second substrate second surface being removably secured to one of said first substrate surfaces proximate said passive loop, said RFID tag having a first operating frequency, said RFID tag being magnetically coupled to said passive loop.
- 10 2. The RFID tag assembly of Claim 1, wherein said passive loop is embedded in said first substrate.
3. The RFID tag assembly of Claim 1, wherein said second substrate second surface includes first adhesive means for attaching said tag member to an article.
4. The RFID tag assembly of Claim 1, wherein said RFID tag is magnetically coupled to said passive loop.
- 20 5. The RFID tag assembly of Claim 1, wherein said passive loop has an inductance and a fixed capacitance that is substantially equal to said first operating frequency.
6. The RFID tag assembly of Claim 1, wherein at least one of said first substrate surfaces includes second adhesive means for attaching said first substrate to an article.
- 25 7. A RFID tag assembly for a shipping container having a plurality of surfaces and at least one passive loop disposed on at least one of the container surfaces, said passive loop being adapted to receive and transmit at least one RFID signal, comprising;
a first substrate having first and second surfaces; and
30 at least one RFID tag member, said tag member including a second substrate having first and second surfaces and at least one RFID tag disposed on said second substrate first surface, said second substrate second surface being removably

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secured to one of said first substrate surfaces, said RFID tag having a first operating frequency,

said first substrate and said RFID tag member being disposed on at least one of said container surfaces proximate said passive loop, said RFID tag being coupled to said passive loop.

8. The RFID tag assembly of Claim 7, wherein said RFID tag is magnetically coupled to said passive loop.

9. The RFID tag assembly of Claim 7, wherein said second substrate second surface includes adhesive means for attaching said tag member to an article.

10. A RFID tag assembly for a shipping container having a plurality of surfaces and at least one RFID tag disposed on or embedded in one the container surfaces, comprising;

a first substrate having first and second surfaces; and
at least a first passive loop disposed on at least one of said substrate surfaces, said passive loop being adapted to receive and transmit at least one RFID signal, said substrate and said passive loop being disposed on at least one of said container surfaces proximate said RFID tag, said passive loop being coupled to said RFID tag.

11. The RFID tag assembly of Claim 10, wherein said passive loop is magnetically coupled to said RFID tag.

12. The RFID tag assembly of Claim 10, wherein said tag assembly includes at least a second passive loop disposed on at least one of said container surfaces, said second passive loop being in communication with said first passive loop.